MORAL IDENTITY, MORAL EMOTIONS AND MALADAPTIVE PERSONALITY TRAITS AMONG ADOLESCENTS IN SOUTH KOREA

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by

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Abstract

The rule of survival of the fittest often thwarted the leap toward holistic development. Korean adolescents have hardly escaped from the fierce competitiveness of knowledge-oriented cognitive education that may generate a gap between moral judgment and action. How does morality associate with personality in adolescent development? Drawing on the theories of Blasi (1980, 1983, 1984, 1988, 1999, 2004a, 2004b) and Allport (1921, 1927, 1931, 1937), the present study took a morality-personality integrative approach to adolescent development and viewed moral identity centrality as an agentic drive for their holistic growth. The current research presumed that there might be developmental consistency to a certain degree among Korean adolescents' morality, personality, and moral/immoral behaviour. Empirically, it aimed at finding out whether moral identity centrality, other-praising moral emotion, and personality dysfunction of maladaptive personality traits are coherent in predicting antisocial behaviour in a sample of 436 Korean adolescents (M = 15.71 years, SD = .70; female 48.4%). The study assumed three hypotheses. Hypothesis 1: Personality dysfunction of multiple maladaptive personality traits predicts antisocial behaviour. Hypothesis 2: Other-praising moral emotion and personality dysfunction mediate moral identity centrality and antisocial behaviour. Hypothesis 3: Sex does not make notable differences in the structural relationship of research variables. The study analyzed the data mainly through structural equation modeling (SEM). As a result, all hypotheses were accepted. First, four multiple maladaptive traits, i.e., negative affectivity, antagonism, disinhibition, and psychoticism, significantly predicted adolescents' antisocial behaviour (β = .791, p < .001) (Hypothesis 1). Second, the modified model readjusted from the research model showed a serial multiple mediation effect of other-praising moral emotion and personality dysfunction between moral identity centrality and antisocial behaviour (Hypothesis 2). Third, multi-group analyses showed apparent coherence among research variables regardless of sex. The results suggested that there exists significant developmental consistency among research variables. Moreover, they provided motives for a morality-driven personality-targeted model of adolescent development for future research and social work practice among Korean adolescents.

Keywords: adolescent, moral development, moral identity, moral emotion, maladaptive personality traits, DSM-5 trait model.

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INTRODUCTION

1. Background

Over the past decade, juvenile violence has nearly quadrupled in juvenile protection cases in South Korea (Court of Korea, 2020). Adolescents may be immature in moral reasoning compared to adulthood, but their intuitive morality may be pretty sensitive (Van de Vondervoort & Hamlin, 2016). According to an extensive social investigation by Statistics Korea in 2019, 41.7 percent of Korean adolescents responded to moral problems (i.e., crimes and a lack of morality) as the major causes of social unrest in South Korea (Statistics Korea, 2020). Even though Korean adolescents recognize that morality is essential to society, why do their antisocial behaviours rarely decrease? What can fill the gap between their moral perception and action? So, it is necessary to find a pathway that bridge morality and action. It has been a long time since Korean youth education realized the limits of cognitive education and the need to transition toward a holistic approach (Baek, 2002). The experiential hindsight of Korean education may be in line with the limitations of the Kohlbergian paradigm of cognitive development. We need to search for an alternative moral construct that can be consistent with personality and behaviour to construct holistic development strategies for Korean adolescents.

2. Research Perspectives

The present study took a morality-personality integrative approach to adolescent development and viewed that moral identity centrality would play an agentic drive in adolescent holistic (i.e., morality-personality integrative) development. As interdisciplinary research becomes wider today, there is growing insight into a person as a holistic organism rather than a mechanical set. The prior research trends guided researchers to explore further how moral identity is associated with personality structure and dysfunction in deriving antisocial behaviour, especially among adolescents in the most robust developmental period. In particular, firstly, recent research from a dimensional approach to psychopathology has helped scholars agree that personality pathology can be dysfunctional dynamics rooted in personality structure (Durbin & Hicks, 2014; Krueger & Markon, 2014). Secondly, the overlap of moral and clinical attributes in personality pathology has become an unavoidable topic in the philosophy of psychiatry (e.g., Charland; 2004, 2006, 2010). Thirdly, unlike traditionally viewing a person as an object or product of genetics and environment,

agentic views have emerged at the beginning of this millennium and helped look at an individual as a subject or producer of behaviour (e.g., Bandura, 2001, 2006; Blasi, 1999). Lastly, recognizing d moral development, moral psychologists foresaw that the coming research wave would be a broader scope of human development, blending moral identity and personality (Lapsley, 2004, 2006; Lapsley & Hill, 2009). A good number of empirical studies support that moral identity would play a crucial role in personality development (Krettenauer & Hertz, 2015).

3. Aim

The present study was aimed at investigating whether Korean adolescents' morality, personality, and behaviour elements (i.e., moral identity centrality, other-praising moral emotion, personality dysfunction and antisocial behaviour) are coherent in their structural relationships.

4. Key Concepts

1) Moral identity centrality

Moral identity is defined as "the degree to which being a moral person is important to an individual's identity" (Hardy & Carlo, 2011, p. 212). Moral identity centrality is one's subjective self-importance desiring to become a virtuous person (Aquino & Reed, 2002).

2) Other-praising moral emotion

Moral emotions are universal and social emotions that respond to moral or normative environments and derive a sense of personal and social welfare (Frijda, 1994; Haidt, 2003; Tangney et al., 2007). Other-praising moral emotion is an emotion type of valuing others elicited by their virtuous deeds and the beneficial consequences. It is an umbrella term of two moral emotions: gratitude and moral elevation (Haidt, 2003). *Gratitude* refers to an emotion of being grateful for benefactors and the benefits received from them (Emmons, 2004). *Moral elevation* is an emotion of being uplifted by witnessing others' virtuous acts called moral beauty (e.g., kindness, loyalty, and sacrifice) (Algoe & Haidt, 2009).

3) Personality dysfunction

Personality dysfunction refers to an individual's dysfunctional level of personality estimated by the DSM-5 maladaptive personality traits. Maladaptive personality traits are a set of clinically-relevant pathological personality traits, which was adopted by the Diagnostic and Statistical Manual of Mental Disorder 5th edition

(American Psychiatric Association, 2013). The DSM-5 maladaptive personality trait model is structurally composed of five domains: *negative affectivity*, *detachment*, *antagonism*, *disinhibition*, and *psychoticism* (Krueger et al., 2012; Krueger & Markon, 2014).

4) Antisocial behaviour

Antisocial behaviour is defined as a behaviour that infringes the fundamental rights of others or social norms (Calkins & Keane, 2009; Frick & Viding, 2009). It can be a delinquent (rule-breaking) or aggressive or the concurrent behaviour. *Delinquency* and *aggression* are conceptually heterogeneous, yet they often coexist among antisocial adolescents.

5. Rationale for the Study

1) Morality as an agentic drive in adolescent social work

The reason why the current study brought morality as an agentic driving force for adolescent development is due to the agentic viewpoint on individuals in social work practices. Social work is different from natural science in approaches to humans (Goldstein, 1987). Social work practices empower and equip clients as responsible agents of value-driven dynamics (Barsky, 2019). Social work has tremendously contributed to spreading the perspective of human agency, which views clients as capable of being purposeful and creative for their narrative accounts (Parsell et al., 2016). Moral virtues are not only social workers' ethical qualities or guidelines, but they should be driving forces of clients as moral agents (Siporin, 1983).

2) Personality pathology in adolescent development

The present study employed a maladaptive personality framework (i.e., DSM-5 traits). It is because there is urgency for the early interventions of adolescent maladaptive personality traits. Adolescence can be a critical period for the early onset of personality disorders (American Psychiatric Association, 2000, 2013). One of the latest innovative changes in psychiatry was the adoption of the DSM-5 trait model (American Psychiatric Association, 2013). The framework made it possible to estimate the severity of adolescent personality dysfunction, and it is potential to bring various utility in clinics and personality development (De Fruyt & De Clercq, 2014; Krueger & Eaton, 2010; Widiger et al., 2005). Precautionary measures to prevent adolescent personality pathology need considerations associated with adolescent development.

3) Morality-personality integrative approach

The present study suggested a morality-driven personality-targeted approach to adolescent development. The integrative approach would facilitate the following goals. First, it would help researchers target personality rather than only behaviour in adolescent development. Personality psychologists have struggled to implement personality-targeted development models (Baumert et al., 2017). Most prior models seem to be stagnant in personality-based behaviour-targeted approaches. Therefore, pursuing the morality-personality integrative model would be innovative in the current challenges. Second, the approach would enlighten how morality influence personality among adolescents. Adolescents' moral cognition (e.g., moral perception, reasoning, and judgment) may affect their moral/immoral behaviour. However, it is not sure whether those are prosocial actions consistent with personality traits. However, moral identity has the potential as a self-consistent and agentic drive for adolescent personality growth and moral action (Hardy & Carlo, 2011; Hart & Matsuba, 2009; Krettenauer & Hertz, 2015; Lapsley & Hill, 2009).

LITERATURE REVIEW

1. Review and Findings

1) Morality in social work

Six articles were reviewed on the implications of morality in social work. The literature supported that morality is essential for social work and provided a rationale for the present study to focus on moral virtues rather than situation ethics (e.g., Goldstein, 1987; Siporin, 1982, 1983, McBeath & Webb, 2002).

2) Morality ins personality pathology

The researcher reviewed on (1) the morality-health relation in personality pathology (nine philosophical studies), and (2) the relationship between pathological traits and morality (four empirical studies). The literature supported morality-health overlap and a need for the morality-personality integrative approach (e.g., Banicki, 2018, 2019; Charland, 2010; Jonason et al., 2017; Međedović & Petrović, 2016).

3) Antisocial behaviour among Korean adolescents

The researcher reviewed eight empirical studies on Korean adolescents' antisocial problems and the associations with personality, social and environmental

factors. The findings implied the close connection of antisocial behaviour with personality among Korean adolescents (e.g., Han & Choi, 2019; Kim et al., 2020; Lee et al., 2018).

4) Existing personality models

The researcher reviewed six integrative personality models to find if they are suitable for basing a morality-personality integrative model. The researcher categorized into three groups and discussed the limitations (e.g., DeYoung, 2015; Fleeson & Jayawickreme, 2015; McAdams & Pals, 2006).

5) DSM-5 maladaptive traits

Four empirical and four conceptual studies showed the characteristics of the DSM-5 traits as a scientifically stable model (e.g., Krueger et al., 2012; Van Dijk et al., 2020). Five empirical studies revealed the constructs associated with the DSM-5 traits such as psychological outcomes and immoral tendencies (e.g., Benzi et al., 2019; Gervasi et al., 2017; Vrabel et al., 2019).

6) Moral identity, personality pathology & antisocial behaviour

Three-empirical and one-conceptual studies were reviewed regarding the close relationship between moral identity and antisocial behaviour (e.g., Gini, Pozzoli & Hymel, 2014; Hardy et al., 2015; Hertz & Krettenauer, 2016). Five empirical studies were reviewed on the significant link between personality pathology and antisocial behaviour (e.g., Chabrol et al., 2017; Pabian et al., 2015). The review of six empirical studies and the four empirical studies of the previous sections supported that the DSM-5 model would provide accounts for the relation of moral identity and antisocial behaviour (e.g., Chabrol et al., 2017; Orue & Calvete, 2019; Risser & Eckert, 2016; Sijtsema et al., 2019).

7) Other praising moral emotions

Ten empirical studies provided the characteristics of other-praising moral emotions, e.g., the significance in adolescent development, the attachment to moral identity, and the influence in antisocial behaviour (e.g., Bono et al., 2019; Lefebvre & Krettenauer, 2019; Pohling et al., 2018).

8) Sex differences

The researcher reviewed four empirical studies and six empirical studies in the previous sections. Some studies showed that there might be differences in respective research variables (e.g., Ha, 2018; Lee et al., 2018; Kim et al., 2020). However, other studies implied that sex differences might rarely occur in the structural relationships of research variables (e.g., Han & Choi, 2019, South et al., 2016).

2. Research Gaps

- Though prior literature pointed out the significance of moral virtues as essential for social work visions and practices, there have not been efforts toward a morality-driven approach in the current social work.
- Most philosophers in psychiatry hardly agree on the morality-health dichotomy nor deny morality-personality overlap in personality pathology. Also, pathological traits were significantly associated with moral virtues/vices. However, morality-personality integrative approaches have not been attempted for adolescent development.
- The literature showed that Korean adolescents' antisocial behaviour is significantly associated with dispositional traits and self-control. However, it is not evident how their personality associates with moral functioning in bringing antisocial behaviour.
- Since existing personality models mainly focus on normative personality structure, they are unsuitable for representing the evaluative degree of personality dysfunction and basing a morality-personality integrative model.
- Prior literature mainly examined bilateral relationships among moral identity, personality pathology, and antisocial behaviour rather than the overall structural relationship.
- Researchers had favored exploring other-praising moral emotions from a view of positive psychology rather than from a moral psychological perspective.

THEORETICAL FRAMEWORK

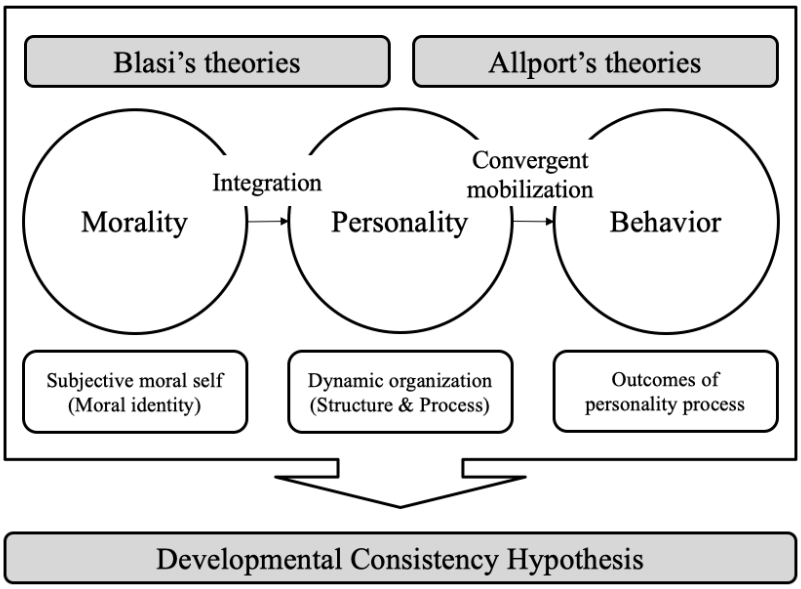
1. Research Questions

- How does adolescent moral development associate with personality development?
- If an adolescent develops a strong sense of centrality to become a morally-virtuous person over time, would the centrality influence their personality dysfunction?
- What would be the intrapersonal mechanism in the morality-personality relation if the centrality to become a virtuous person could significantly reduce personality dysfunction?
- Would the mechanism work in consistency between morality and personality?

2. Theoretical Background

The research inferred the theoretical framework drawing on Blasi's (1980, 1983, 1984, 1988, 1999, 2004a, 2004b) theories on moral identity, moral emotion, and morality-personality relation and Allport's (1921, 1927, 1931, 1937) theories on trait conceptions and personality-behaviour relation. It named the synthesis of the theoretical assumptions as "developmental consistency hypothesis" for convenience (Figure 1).

Figure 1 Theoretical background



1) Morality-personality relation: Blasi (1980, 1983, 1984, 2004a)

Morality is not a structural collection of personality traits but an integrated operation in the self (Nucci, 2001). Blasi (1980, 1983, 1984, 2004a) viewed that a self-consistent core of morality (i.e., moral identity) can motivate a person towards moral actions as an integrated mechanism to the overall personality system (Blasi, 1980). Blasi (2004a) elaborated hypotheses on how morality is related to personality: 1) Morality is not an autonomous process but a specific mode of functioning of a person as a whole. 2) Morality (esp., moral competence) integrates into the overall personality system. 3) Morality integrates into the personality system so that it maintains reciprocal respect with personality. 4) A minimal grasp of moral understanding guides intentions to do moral actions. 5) Personality is capable of being motivated by what is central to morality.

2) Personality-behaviour relation: Allport (1927, 1931, 1937)

Allport's (1927, 1931, 1937) conceptualized a trait in association with behaviour as followings: 1) A trait is not a mere structure of habits, but it functions as

a whole to bring constant stimuli (Allport, 1927, 1931, 1937). 2) A trait is functionally independent of "its cause" but more characterized by "what it causes" and "its fruits" (Allport, 1927, p.6). 3) A behavioural pattern occurs by the functional dynamics of the multiple dispositional traits related to the behaviour. Allport (1937, p.313) called it "convergent mobilization." 4) A person's behaviour might not be genuine if the manifestation were not rooted in the person's multiple dispositional traits corresponding to the behaviour (Allport, 1937; Funder, 1991).

3) Moral identity: core of morality & agentic drive of development

Blasi (2004b) viewed that moral identity resides somewhere in the non-focal consciousness of the self to motivate moral actions while maintaining integrity to the self. The integrity (or self-consistency) refers to an outcome through the "responsible actualization" of moral understanding and "the development of the whole person" (Blasi, 1983, p.206). Moral identity can be a plausible moral construct to affect both personality and moral/immoral behaviour because it is a stable (enduring), agentic (subjective) and self-consistent drive to motivate moral actions (e.g., Blasi, 2004a, 2004b; Blasi & Glodis, 1995; Boegershausen et al., 2015; Hertz & Krettenauer, 2016).

4) Moral emotions: what links moral identity to personality

If moral identity integrates into the overall personality system (structure and function), how can it influence personality? Scholars often highlighted moral emotions as a key to moral identity development as an alternative to cognitive moral development (Hardy & Carlo, 2011; Krettenauer & Hertz, 2015; Shao et al., 2008). Goffman (1959) viewed that the production of emotions is rooted in the centrality of the self. Emotional stability considerably grows in adolescence (Klimstra et al., 2009). Blasi (1999) viewed that emotions (esp., moral emotions) reflect and serve a person's agentic moral motives (i.e., moral identity).

3. Developmental consistency hypothesis

The present study assumed that a person would carry a certain degree of self-consistency over time among morality, personality, and moral/immoral behaviour.

1. Supposed what is central to morality integrates into the overall personality system (Blasi, 2004b). To a certain degree, adolescents' moral identity would maintain consistency with their personality structure and process.
2. Supposed a person's personality traits convergently mobilize to cause a particular pattern of moral/immoral behaviour (Allport, 1937). The

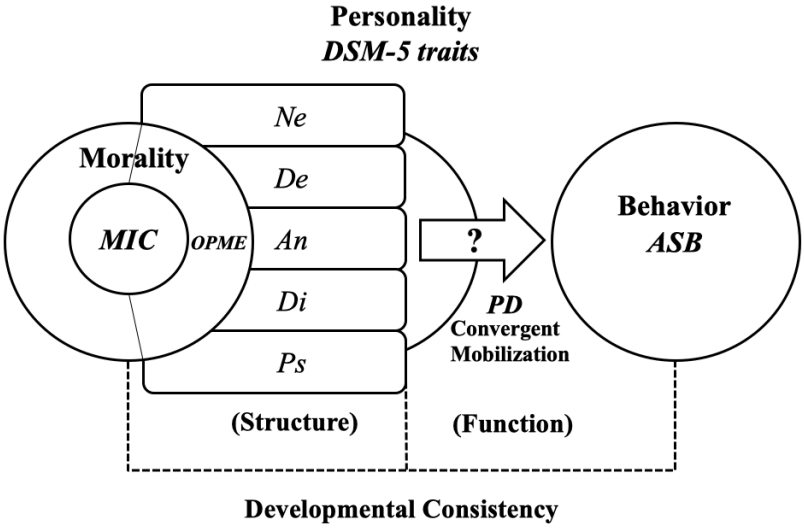
functional/dysfunctional degree of the multiple traits would predict the person's propensity to moral/immoral behaviour.

3. Adolescent development would occur maintaining a certain degree of consistency in their moral identity, personality, and moral/immoral behaviour.

4. Hypothetical Framework

Figure 2 displays a hypothetical diagram of adolescent morality, personality and behavior. It describes the assumption that there would be a certain degree of consistency among moral identity centrality, other-praising moral emotion, personality dysfunction and antisocial behaviour.

Figure 2 Hypothetical diagram of adolescent morality, personality and behaviour



Note. MIC (moral identity centrality), OPME (other-praising moral emotion), PD (personality dysfunction), ASB (antisocial behaviour), DSM-5 traits (*Ne*: negative affectivity, *De*: detachment, *An*: antagonism, *Di*: disinhibition, *Ps*: psychoticism).

RESEARCH METHOD

1. Objectives of the Study

1) To explore how moral identity centrality associates with other-praising moral emotion and personality dysfunction in predicting antisocial behaviour.
2) To examine whether adolescent other-praising moral emotion and personality dysfunction mediate moral identity centrality and antisocial behaviour.

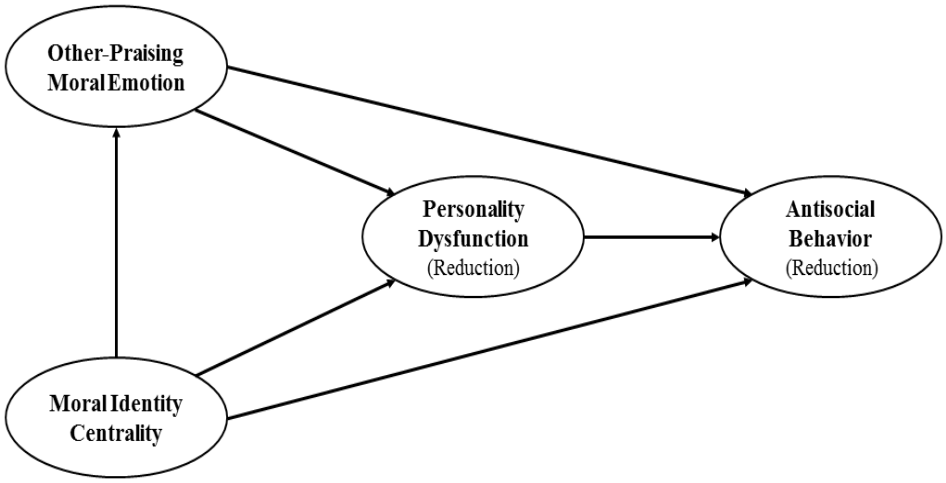
3) To find out whether sex makes differences in the structural relationship of moral identity centrality, other-praising moral emotion, personality dysfunction and antisocial behaviour.

2. Research Model and Hypotheses

1) Research model

The study constituted the research model (Figure 3) to be measurable with the structural equation modeling (SEM). This model aims to test a set of research hypotheses in the structural relationship among research variables.

Figure 3 Research model



2) Hypotheses

- *Hypothesis 1*: Adolescents' personality dysfunction of multiple maladaptive personality traits predicts antisocial behaviour.
- *Hypothesis 2*: Adolescents' other-praising moral emotion and personality dysfunction mediate moral identity centrality and antisocial behaviour.
- *Hypothesis 3*: Adolescents' sex does not make significant differences in the structural relationship of moral identity centrality, other-praising moral emotion, personality dysfunction and antisocial behaviour.

3. Conceptual and Operational Definitions

1) Moral identity centrality

- **Conceptual definition**: the degree to which being a moral person is important to an individual's identity.

- **Operational definition**: the self-evaluative degree to which one usually thinks it important to be a person of moral virtues (i.e., caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, kind).

2) Other-praising moral emotion

- **Conceptual definition**: an emotion of valuing others elicited by their virtuous deeds and the beneficial consequences, i.e., gratitude and moral elevation.
    - Gratitude: an emotion of being grateful for beneficiaries and the benefits.
    - Moral elevation: an emotion of being uplifted for others' acts of virtue/moral beauty.
- **Operational definition**: the arithmetic mean value of the self-evaluative gratitude and moral elevation measures.
    - Gratitude: the self-evaluative degree to which an individual usually feels grateful for beneficiaries and the benefits.
    - Moral elevation: the self-evaluative degree to which an individual feels a sense of warmth, uplifting and good desires when they witness virtuous acts of others.

3) Personality dysfunction

- **Conceptual definition**: the dysfunctional level of personality estimated by the DSM-5 maladaptive personality traits.
- **Operational definition**: the arithmetic mean value of the self-evaluative level/s on how much a person thinks, feels, and behaves like a person in characteristic of the DMS-5 maladaptive trait/s (i.e., negative affectivity, detachment, antagonism, disinhibition, and psychoticism).

4) Antisocial behaviour

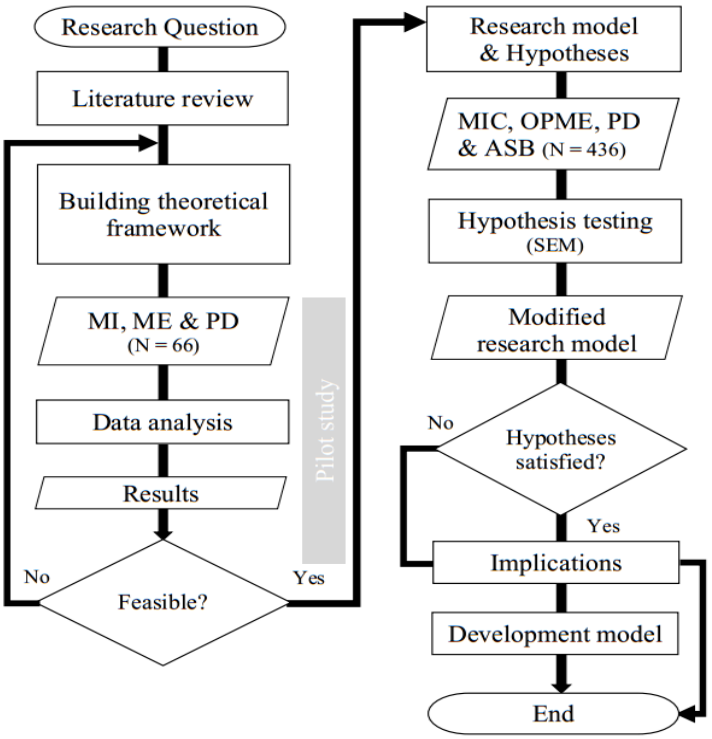
- **Conceptual definition**: the behaviour that infringes the fundamental rights of others and social norms.
- **Operational definition**: the arithmetic mean value of self-evaluative degrees on how much a person is aggressive and delinquent (rule-breaking) in behaviour.

4. Research Design and Flow

The present study is *fundamental research* to develop theoretical basis for adolescent development. The research employed *quantitative* and *correlational research designs* to empirically verify the research model and hypotheses. The research also employed *a cross-sectional research design* since the concern of the study is on the analysis of associations among intrapersonal constructs concurrently rather than intervariable causal effects over time.

Figure 3 describes the research flow. The study composed a theoretical framework and explored the feasibility in the pilot study to elaborate research model and hypotheses. The research used structural equation modeling (SEM) for the quantitative model verification. Based on the results, the study proposed a conceptual framework for the morality-personality integrative development of Korean adolescents and future research.

Figure 3 Research flow diagram



Note. DCH (Development consistency hypothesis), MI (Moral identity), ME (Moral emotion), MIC (Moral identity centrality), OPME (Other-praising moral emotion), PD (Personality dysfunction).

5. Pilot study

Aim (pilot study)

The pilot study aimed at exploring the feasibility of the primary research and reflecting the findings in constructing the research model. Specifically, it investigated the relationships among the following three groups of variables among Korean adolescents.

Objectives (pilot study)

1. To explore whether moral identity centrality significantly associate with moral emotions and maladaptive personality traits.
2. To find out moral emotions that best explain/mediate the influence of moral identity centrality on personality dysfunction.

Participant and procedure (pilot study)

Participants were 66 South Korean male adolescents in the 1st and 2nd grade high school students in Seoul. Their ages ranged from 15 to 18 (M = 16.18, SD = .70). The data was collected by purposive sampling. Three groups of variables (i.e., moral identity, moral emotions and maladaptive personality traits) were assessed by self-report evaluation. The survey was carried out after the participants' and their parents' consent.

Measures and validation (pilot study)

Three groups of variables (i.e., moral identity, moral emotions and maladaptive personality traits; fifteen variables including sub-variables) were assessed by self-report evaluation. Table 1 displayed the Cronbach alpha reliability of each variable. Most variables were suitable (above .70) or very good (above .80) in their internal consistency. Guilt and psychoticism were in the acceptable range (between .60 and .70).

Table 1 Measures of variables and reliability

Tool	Variable	Cronbach α
Moral Identity Scale (Aquino & Reed, 2002)	Moral Identity Centrality	.77
	Symbolization	.88
TOSCA-A (Tangney et al., 1991)	Guilt	.67
	Shame	.78
Authentic and Hubristic Pride Scales (Tracy & Robins, 2007)	Authentic Pride	.90
	Hubristic Pride	.90
Dispositional Contempt Scale (Schriber et al., 2017)	Contempt	.76

Basic Empathy Scale (Jolliffe & Farrington, 2006)	Empathy (affective)	.84
Gratitude Questionnaire (GQ-6) (McCullough et al., 2002)	Gratitude	.79
Engagement With Beauty Scale (Diessner et al., 2008)	Moral Elevation	.92
Personality Inventory for DSM-5 Brief Form (PID-5-BF) (American Psychiatric Association, 2013)	Negative Affectivity	.76
	Detachment	.72
	Antagonism	.74
	Disinhibition	.76
	Psychoticism	.68

Data analysis (pilot study)

The pilot study utilized IBM SPSS Statistics for Windows, Version 25.0 (NY: IBM Corp.) and employed PROCESS, an SPSS macro developed by Hayes (2021). A Pearson correlation test was used to analyze the overall bivariate correlations among the trilateral variables. A mediation analysis investigated the mediating role of other-praising moral between moral identity centrality and personality dysfunction.

6. Scope of the Study

1) Universe

The population of the present research is Korean adolescents around mid-adolescence ages (between 15 and17). Adolescents at this age are mainly students in their first or second year of high school in South Korea. According to Korean Educational Statistics Service (https://kess.kedi.re.kr/eng/index), the population size (i.e., the first and second grade students of Korean high schools) was 909,411 in 2019.

2) Sample size

The present research used a sample of 436 adolescents. The present study set up a 95 percent confidence level ($Z = 1.96$), a 5 percent confidence interval (*CI*, margin of error) and a 0.5 standard deviation (*SD*). The required sample size by the formula, (*Z*-score)^2 × *SD* × (1-*SD*)/*CI*^2, was 385. The sample size of the present research was appropriate to represent the population.

3) Inclusion and exclusion criteria

The sample included Korean adolescents who attended in the first and second grade high school classes at the time of survey. However, it excluded the adolescents who were not in school education and the students who had participated in the pilot study to avoid extraneous variables.

4) Geographical area and duration

Due to the time and regional limits, the sample was collected from seven high schools, in Seoul (national capital) and near-capital regions in Gyeonggi province. All the high schools were located in urban areas. The samples were collected in 2019 before the outbreak of covid-19 pandemic.

7. Data Collection

1) Sampling method and procedure

Purposive sampling was employed in consideration of the sample's geographical region, school type, age, and sex ratio. The researcher had requested 35 high schools in Seoul and Gyeonggi province to conduct surveys among adolescents aged 15 to 17. As a result, data were collected from seven high schools that permitted data collection. Surveys were carried out after obtaining parental consent and adolescents' agreement. 504 questionnaires were collected out of 520 questionnaires distributed. A sample of 436 adolescents (females 48.4 %), aged around 15.71 (*SD* = .70), was selected for the data analysis after excluding questionnaires with no responses, unfaithful responses, and missing questions.

2) Tools for data collection

- ***Moral identity centrality*** was assessed by the internalization subscale of the Moral Identity Scale (Aquino & Reed, 2002). The study used the Korean version of the National Youth Policy Institute in South Korea (Choi et al., 2011). On a Likert scale, participants rated how much they agree with statements such as "It would make me feel good to be a person who has these characteristics." The internal consistency was .73 at the development.
- ***Other-praising moral emotion*** was assessed by using two different scales.
  Gratitude was measured by Gratitude Questionnaire (GQ-6) (McCullough et al., 2002). Kwon, Kim, and Lee (2006) translated it into the Korean version (K-GQ-6) and validated it. Participants were asked to rate on a Likert scale how much they agree with statements about grateful feelings (e.g., "I am grateful to a wide variety of people"). The internal consistency reliability was .85 at the development.
  Moral elevation was assessed by a 6-item moral beauty subscale of the Engagement with Beauty Scale (EBS) (Diessner et al., 2008). The researcher translated the scale into Korean and confirmed the accuracy by another's reverse translation. Participants rated on a Likert scale after reading statements

such as “When perceiving an act of moral beauty, I feel emotional, it moves me, such as feeling a sense of awe, or wonder or excitement or admiration or upliftment.” The alpha reliability was .85 at the development.

- ***Personality dysfunction*** was assessed by Personality Inventory for DSM-5 Brief Form (PID-5-BF; American Psychiatric Association, 2013; Krueger et al., 2012). The study employed the Korean version translated and validated by Shin and Hwang (2016). Each item has a self-descriptive statement such as “I feel like I act totally on impulse” and “I am not good at planning ahead.” Participants were asked to read the statements and rate on a Likert scale.
- ***Antisocial behavior*** was captured by a Korean version of externalizing problem behavior subscales (i.e., aggression, delinquency) reconstructed by Jang (2001) from the Youth Self Report (YSR) (Achenbach, 1991). Nine items are about *aggression*, and the statements are such as “I often fight,” “I often tease others,” “I sometimes threaten others.” Another nine statements were about *delinquency*, such as “I often lie,” “I usually drink or smoke,” “I have ever stolen something outside the home.” Participants were asked to indicate on a Likert scale. The internal consistency of the scales in Korean studies has been above the suitable threshold (.70).

2) Reliability of measures

Ten variables (incl. sub-variables) were assessed among Korean adolescents. Cronbach alpha reliability tests verified the internal consistency of every variable. Most variables were suitable (above .70) or very good (above .80) and detachment was in the acceptable range (between .60 and .70) (Table 2).

Table 2 Measures of variables and reliability

Tool	Variable	Cronbach α
Moral Identity Scale (Aquino & Reed, 2002)	Moral Identity Centrality	.78
Gratitude Questionnaire (GQ-6) (McCullough et al., 2002)	Gratitude	.88
Engagement With Beauty Scale (Diessner et al., 2008)	Moral Elevation	.84
Personality Inventory for DSM-5 Brief Form (PID-5-BF) (American Psychiatric Association, 2013)	Negative Affectivity	.79
	Detachment	.66
	Antagonism	.72
	Disinhibition	.73

	Psychoticism	.76
Youth Self Report (YSR) (Achenbach, 1991)	Authentic Pride	.75
	Hubristic Pride	.84

3) Construct validity of measures

Table 3 provides convergent validity indices of latent variables in the modified measurement model. The convergent validity of each latent variable was deemed satisfactory by the average variance extracted (AVE) value greater than 0.5 and the composite reliability (CR) ratio greater than 0.6 (Ab Hamid et al., 2017).

Table 3 Convergent validity of latent variables (N = 436)

Latent variable	AVE	CR
Moral identity centrality	0.506	0.800
Gratitude	0.547	0.800
Moral elevation	0.505	0.830
Personality dysfunction	0.511	0.806
Antisocial behaviour	0.573	0.728
Other-praising moral emotion	0.527	0.687

Note. AVE: Average variance extracted, CR: Composite reliability

Table 4 provides the correlations and latent variables' heterotrait-monotrait (HTMT) ratios. For discriminant validity assessment, the present study employed the HTMT criterion suggested by Henseler et al. (2015). A satisfactory discriminant validity requires ratios less than 0.85 or at least 0.90. All statistics of the three indices met the recommended thresholds.

Table 4 Discriminant validity of latent variables (N = 436)

Latent variable	Correlation (HTMT)			
	1	2	3	4
Moral identity centrality	-			
Gratitude	.500(.506)	-		
Moral elevation	.463(.474)	.515(.558)	-	
Personality dysfunction	-.309(.300)	-.410(.416)	-.201(.207)	-
Antisocial behaviour	-.300(.325)	-.354(.366)	-.236(.286)	.819(.827)

Note. HTMT: Heterotrait-monotrait ratio of correlation.

8. Data Analysis

1) Analysis tools

The present study utilized IBM SPSS Statistics for Windows, Version 25.0 (NY: IBM Corp.) to analyze the descriptive statistics and correlations of research

variables. Since the present study aims to simultaneously test multivariate relationships among research variables, the proposed hypotheses were analyzed using SPSS AMOS, Version 22.0 (Chicago: IBM SPSS). Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.).

2) Analysis techniques

Firstly, the study conducted a descriptive analysis to provide the observed and latent variables' arithmetic means and standard deviations. The normal distributions of the variables were verified by skewness and kurtosis. Secondly, A Pearson correlation test was conducted to analyze the relationships among research variables. Thirdly, confirmatory factor analyses (CFAs) was used to verify the measurement model's construct validity (convergent and discriminant validity). Fourthly, structural equation modeling (SEM) was employed to verify the paths of the research model. Fifthly, bootstrapping was used to estimate the mediating effects of other-praising moral emotion and personality dysfunction. Lastly, an independent t-test and a multi-group analyses (MGAs) were performed to compare sex differences of research variables and the research model between male and female adolescents.

9. Ethical Considerations

- The present study's protocol was reviewed and proven by the research ethics committee of the Centre for Research (Appendix B).
- The researcher also observed ethical guidelines in the Korean Association of Youth Welfare (http://www.youthwelfare.org/html/sub01_06.asp) in conducting surveys among Korean high school students.
- The researcher explained research purpose, confidentiality, anonymity, right to halt, and brief guidelines through the informed consent form (Appendix C-2) and the surveys were carried out after obtaining parental consent and adolescents' agreement.

RESULTS AND DISCUSSION

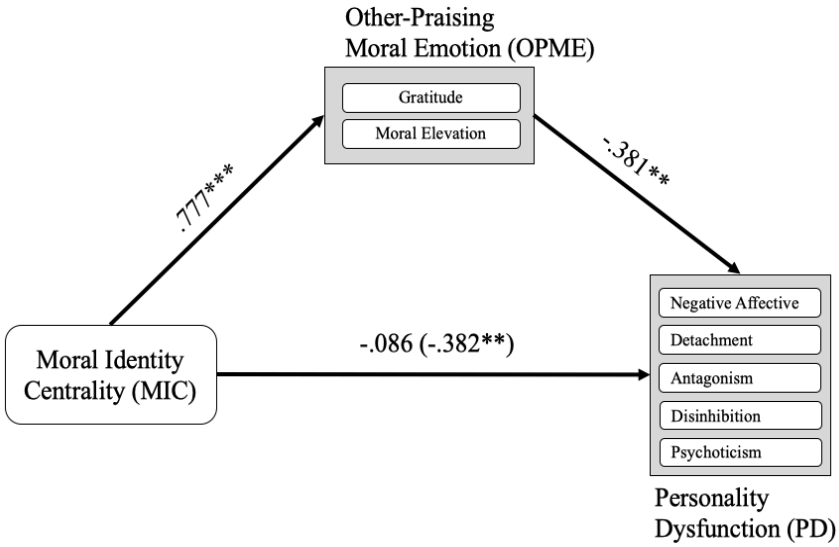
1. Pilot Study

1) Results

First, the study investigated the bivariate correlations among the three groups of variables. The results are summarized in the followings.

- Significant correlations among three groups of variables (i.e., moral identity, moral emotions, and maladaptive personality traits).
- Moral identity centrality was significantly and broadly correlated with other variables compared to symbolization.
- Moral identity centrality has the highest levels of positive correlations with other-praising moral emotions among moral emotions: gratitude ($r = .530$, $p < .001$) and moral elevation ($r = .644$, $p < .001$).
- Gratitude and moral elevation showed a similar pattern of significant correlations with other moral emotions.

Figure 4 Other-praising moral emotion mediation model



Note. ** $p < .01$ ** $p < .001$ direct (indirect), N = 66

Second, it examined whether the mediating effecting effect of other-praising moral emotion (i.e., gratitude and moral elevation) between moral identity centrality and the personality dysfunction of maladaptive personality traits. A mediation analysis indicated that other-praising moral emotion mediated moral identity centrality and personality dysfunction (Figure 4).

- The indirect effect of other-praising moral emotion was significant, $B = -.296$, 95% CI [-.535, -.065], $p < .001$.
- Other-praising moral emotion accounted for 77.5 percent of the impact of moral identity centrality on personality dysfunction.

2) Discussion: applying to the primary research

The pilot study results helped design the research model of the primary study.

- The researcher employed moral identity centrality as a better determinant representing Korean adolescents' morality-personality relation than symbolization.
- The present study structurally placed gratitude and moral elevation under a latent variable called other-praising moral emotion (cf. Haidt, 2013b).
- The result of the mediation analysis guided to posit other-praising moral emotion as a plausible mediator between moral identity centrality and personality dysfunction in the structural research model.

2. Descriptive Statistics

The participants are 436 1st and 2nd grade Korean high school students aged around 16 (M =15.71 years, SD = .70) in the national capital and near-capital regions. The demographic profile of the respondents is as followings (Table 5).

Table 5 Demographic profile of participants

(N = 436)

Variable	Classification	Frequency	Percentage
Sex	Male	225	51.6
	Female	211	48.4
Grade	1st Grade	293	67.2
	2nd Grade	143	32.8
School type	Boy's	117	26.8
	Girl's	116	26.6
	Coeducational	203	46.6
Religion	No Religion	255	58.5
	Christianity	156	35.8
	Buddhism	19	4.3
	Other	6	1.4
Family type	Nuclear	367	84.2
	Extended	30	6.9
	Single-parent	26	5.9
	Other	13	3.0
Parent	Both	397	91.1
	Single	39	8.9
Residence	Home	415	95.2
	Hostel & other	21	4.8
Total		436	100.0

Table 6 displays the descriptive statistics of research variables with their raw scores. To catch a glimpse of the degree that the statistics indicate, the researchers compared the mean values to previous outcomes in the studies that employed the same scales as the present research.

Table 6 Descriptive statistics of research variables (raw scores)

(N =436)

Variable	Sub-variable	Min	Max	*M*	*SD*
Moral identity centrality		2.80	7.00	5.85	0.86
Other-praising moral emotion	Gratitude	1.67	7.00	5.59	1.03
	Moral elevation	1.17	5.00	3.60	0.75
Personality dysfunction (DSM-5 traits)	Negative affectivity	0.00	2.80	1.08	0.65
	Detachment	0.00	3.00	0.87	0.51
	Antagonism	0.00	2.60	0.74	0.51
	Disinhibition	0.00	3.00	1.02	0.56
	Psychoticism	0.00	3.00	0.98	0.63
	Total dysfunction	0.00	2.75	1.17	0.55
Antisocial behaviour	Delinquency	1.00	3.79	1.63	0.51
	Aggression	1.00	4.00	1.95	0.71

1) Moral identity centrality

Particiapants' average moral identity centrality (M = 5.85, SD = .86): lower than or similar to Western youth and adult respondents (e.g., Glenn et al., 2010; Gotowiec & van Mastrigt, 2019; Pohling et al., 2018; Reed et al., 2007; Winterich et al., 2013), similar to Indian youths who were not using drugs, considerably higher than the drug-using Indian youngsters' level (Kim, 2021), and higher than adolescents aged 17 to 19 in Daegu, South Korea (Ha, 2018).

2) Other-praising moral emotion

- Participants' gratitude (M = 5.59, SD = 1.03): slightly lower than Korean and German adults' degrees (Pohling et al., 2018; Yoo, 2020), higher than Chinese young adolescents around 13 years old (Sun et al., 2019; Yang et al., 2020), similar to the measure among Chinese adolescents aged around 15 (Kong et al., 2020), and quite higher than North Indian adolescents aged from 16 to 18 years (M = 4.75) (Anand et al., 2021).
- Participants' moral elevation (M = 3.60, SD = .75): considerably lower than German adult respondents (M = 4.90) (Pohling et al., 2018).

3) Personality dysfunction

Participants' total personality dysfunction (M = 1.17, SD = .55): out of 436 respondents, 242 adolescents (55.5 %) were mild, 191 adolescents (43.8 %) were moderate, and 3 adolescents (0.7 %) were problematic in their personality dysfunction. Table 7 displays the details of personality dysfunction by domain. It is observed that every domain's score increases as the total score increases.

Table 7 Personality dysfunction of maladaptive trait domains

	Personality Dysfunction ($M \pm SD$)					
	Neg.	Det.	Ant.	Dis.	Psy.	Total
Mild (n = 242)	0.72 ± .53	0.60 ± .35	0.48 ± .37	0.71 ± .46	0.59 ± .43	0.62 ± .27
Moderate (n = 191)	1.50 ± .50	1.19 ± .47	1.07 ± .47	1.38 ± .41	1.45 ± .50	1.32 ± .24
Problematic (n = 3)	2.33 ± .12	2.13 ± .23	1.47 ± .61	2.47 ± .50	2.13 ± .61	2.11 ± .08

Note. The severity classification was divided by total personality dysfunction (0-1: mild, 1-2: moderate, 2-3: problematic).

4) Antisocial behaviour

Participants' aggression (M = 1.95, SD = .71) was slightly higher than delinquency (M = 1.63, SD = .51) in the raw scores.

3. Hypothesis 1

1) Results

Figure 5 Path diagram of structural model

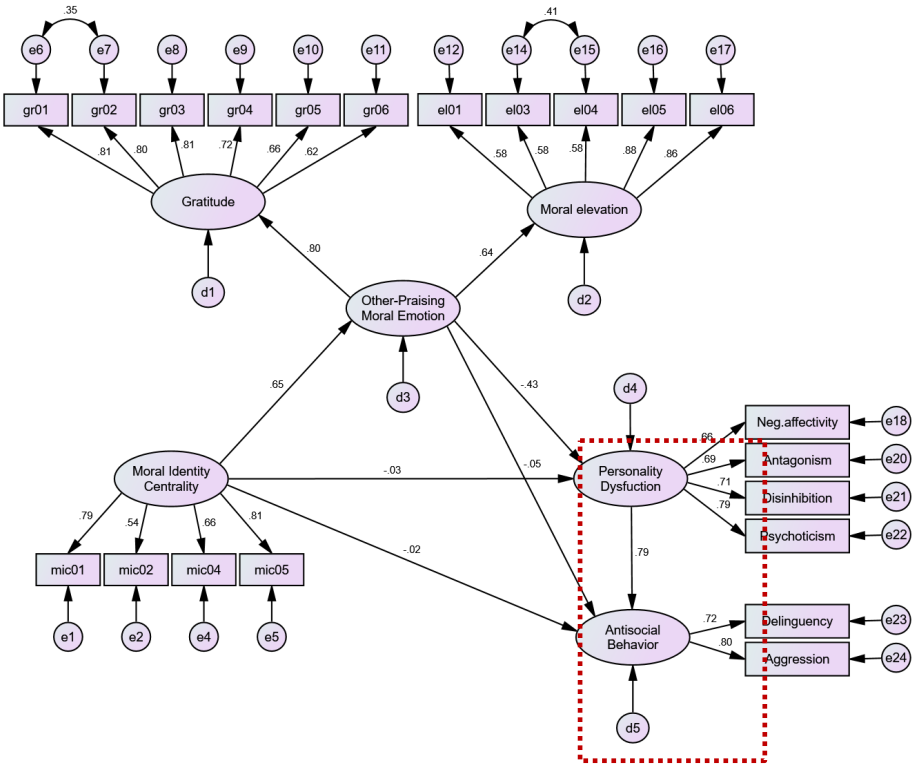


Figure 5 displays the path diagram of structural model. The overall personality dysfunction level of four DSM-5 maladaptive personality traits (i.e., negative affectivity, antagonism, disinhibition, and psychoticism) significantly predicted adolescents' antisocial behaviour. The personality dysfunction level highly predicted

antisocial behaviour (β = .791, p < .001). The results supported Hypothesis 1: Adolescents' personality dysfunction of multiple maladaptive personality traits predicts antisocial behaviour.

2) Discussion

The results support that Korean adolescents with higher personality dysfunction in the DSM-5 traits are more likely to violate others' rights and social norms. Notably, personality dysfunction showed strong predictability (β = .791, p < .001) for antisocial behaviour. It suggests that personality dysfunction can significantly affect antisocial behaviour more than any other situational and cognitive variables that may influence behaviour. According to Moffitt's (1993) taxonomy, the result suggests that Korean adolescents' antisocial behaviour may be more influenced by life-course-persistent (pathological) causes than adolescence-limited (contextual) ones. Adolescent antisocial behaviour may not end up as transitional phenomena in adolescence but can lead to personality disorders when they become adults. Therefore, the significant personality-behaviour coherence among Korean adolescents implies the need of early interventions to prevent personality pathology among Korean adolescents. As the descriptive statistics showed, 0.7 percent of the adolescents were problematic, and 43.8 percent were in moderate personality dysfunction, which might develop into severe conditions. Adolescent antisocial behaviour is rising, and the age is becoming younger (Ministry of Education, 2020). It is urgent to pay attention to Korean adolescents' maladaptive personality traits to bring strategies to reduce their antisocial behavior.

The findings also suggest that maladaptive personality traits may have particular dynamics that explain the influence of moral identity centrality on antisocial behaviour. First, the significant association of negative affectivity, antagonism, and disinhibition with antisocial behaviour is noticeable. Many FFM studies showed that their structurally-resembling normative traits, i.e., neuroticism (negative affectivity), agreeableness (antagonism), and conscientiousness (disinhibition), were significant predictors of antisocial behaviour or externalizing problem behaviour (John et al., 2008; Jones et al., 2011; Larstone, 2011, Markon et al., 2015). DeYoung (2015) classified the three trait dimensions as characterizing stability, which refers to the capacity to resist disruption (maladaptation to anomaly). Therefore, the result suggests that Korean adolescents' antisocial problems might more associate with the instability implicit in their personality traits than environmental stimuli. Second, the structural model showed psychoticism as a significant determinant of antisocial behaviour. The

result is in line with prior findings on its negative effect on adolescent behaviour (Benzi, 2019; Noser et al., 2015; Gervasi et al., 2017). In the factor loadings, psychoticism appeared as the trait best representing the variance of the overall personality dysfunction. Third, the results suggest that antagonism, disinhibition, and psychoticism are outstanding maladaptive traits that convey the influence of moral identity centrality in antisocial behaviour. In the bivariate correlation tests, there were distinctions among maladaptive traits. Antagonism, disinhibition, and psychoticism had significant correlations with moral identity centrality and antisocial behaviour. However, negative affectivity was not significantly correlated with moral identity centrality, and detachment was less associated with antisocial behaviour than the other four maladaptive traits.

The verification of Hypothesis 1 provides evidence to support the convergent mobilization hypothesis of Allport (1937). The overall personality dysfunction of multiple maladaptive traits strongly predicted antisocial behaviour though psychoticism was the most relevant trait. It implies that dispositional traits can operate as an integrative dynamic rather than fragmental segments. Allport (1927, 1931, 1937) viewed personality traits as constant stimuli functioning as a whole. When the present study assessed evaluative degrees of personality through the DSM-5 trait model, it was possible to bring the explanatory accounts of personality by showing solid predictability of personality on antisocial behaviour.

4. Hypothesis 2

1) Results

Table 8 Direct, indirect and total effect among latent variables (N=436)

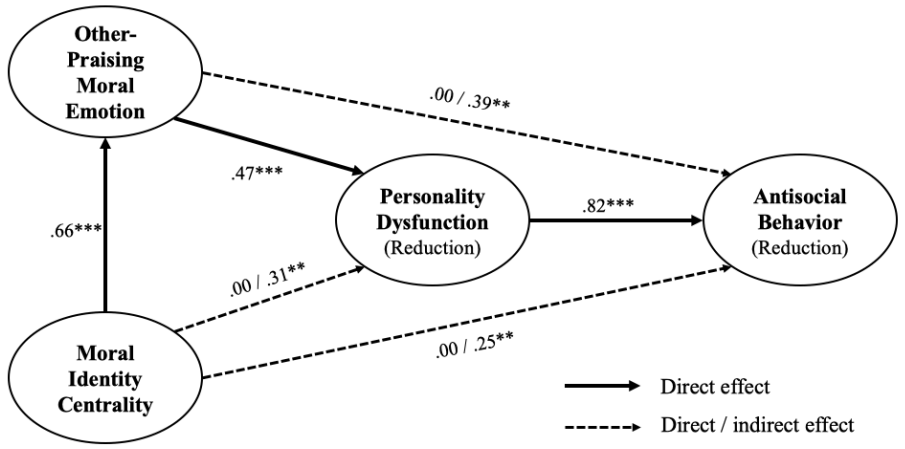
	Total effect (direct effect, indirect effect)		
Latent variable	MIC	OPME	PD
OPME	.659 (.659***, .000)		
PD	-.308 (.000, -.308**)	-.468 (-.468***, .000)	
ASB	-.254 (.000, -.254**)	-.385 (.000, -.385**)	.822 (.822***, .000)

Note. ** $p < 0.01$, *** $p < 0.001$, MIC: Moral identity centrality, OPME: Other-praising moral emotion, PD: Personality dysfunction, ASB: Antisocial behaviour.

The researcher conducted bootstrapping to estimate the significance of indirect (mediating) effects. As a result, other-praising moral emotion and personality dysfunction mediated moral identity centrality and antisocial behaviour (Table 8 & Figure 6). The results accepted Hypothesis 2: Adolescents' other-praising moral

emotion and personality dysfunction mediate between moral identity centrality and antisocial behaviour.

Figure 6 Direct and indirect effects in research model (N = 436)



Note. ** $p < 0.01$, *** $p < 0.001$

2) Discussion

Korean adolescents with a greater desire to be moral in their identities were less likely to be antisocial in behaviour. The result replicated prior studies in various countries and age groups (Hardy & Carlo, 2011; Hertz & Krettenauer, 2016). Regarding why adolescent moral identity centrality predicted antisocial behaviour, the bootstrapping results suggest that adolescents with a solid moral identity centrality were less likely to be dysfunctional in their personalities. Prior studies often viewed personality traits as descriptive and distal causes of behaviour and posited moral cognition between personality and behaviour (Han & Choi, 2019; Sijtsema et al., 2019; Orue & Calvete, 2019). However, the current study's findings showed the possibility that personality as a function can bridge morality and behaviour as assumed in the theoretical framework.

The mediating role of other-praising moral emotion suggests that they can serve to integrate adolescents' moral identity centrality into their personality traits. As Blasi (1999) viewed moral emotion as dependent on the pre-existing moral identity, other-praising moral emotion reflected moral identity centrality. Moreover, the mediating effect suggests that other-praising moral emotions can internalize the influence of moral identity in personality. Therefore, the result strongly supports scholars' prospects that moral emotion would contribute to moral identity development more than moral cognition (e.g., Hardy & Carlo, 2011; Krettenauer & Hertz, 2015; Shao et al., 2008). Scholars have mostly illuminated the significance of

gratitude and moral elevation from the view of positive psychology (e.g., Bono et al., 2019; Fredrickson, 2004). However, they should also draw attention from a morality-personality integrative perspective for adolescent development.

The results showed concrete consistency in adolescents' moral identity centrality, other-praising moral emotion, personality dysfunction and antisocial behaviour. The strong consistency of research variables among Korean adolescents suggests a need for the morality-personality integrative approach to adolescent development.

5. Hypothesis 3

1) Results

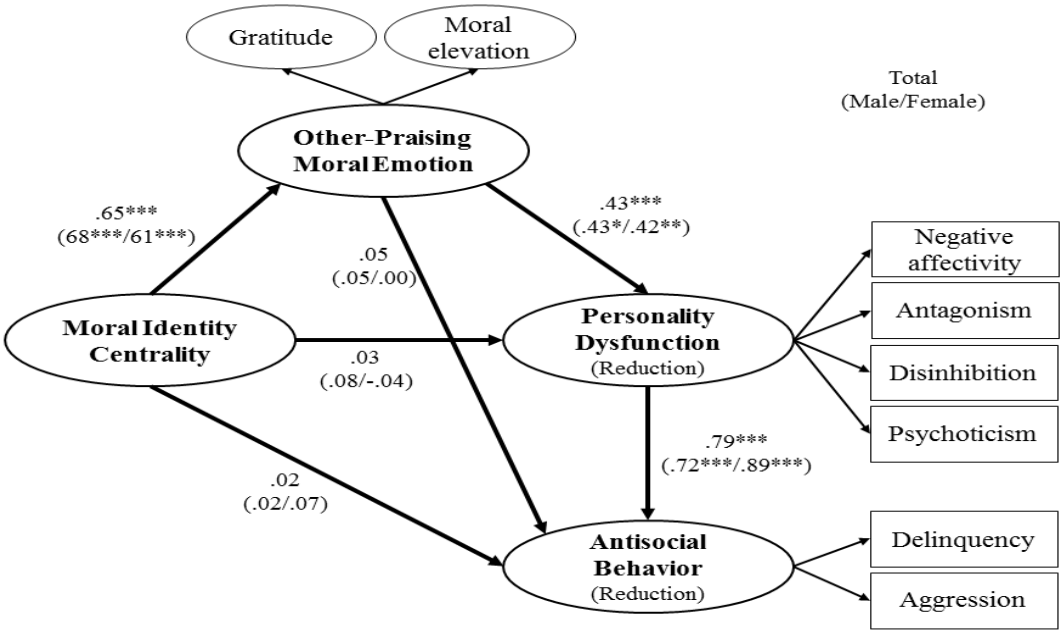
An independent *t*-test indicated all variables showed non-significant sex differences except delinquency (Table 9). Boys were significantly higher in delinquency than girls ($t = 2.842$, $p < .01$). Multi-group analyses (MGAs) showed non-significant sex differences in the structural model ($\Delta\chi 2 = 5.513$, $\Delta df = 6$, $p = .480$) and the modified structural model ($\Delta\chi 2 = 5.088$, $\Delta df = 3$, $p = .165$). Overall, sex was not a significant determinant enough to make substantial sex differences sufficient to alter the structural associations among research variables (Figure 7 & 8). The results supported Hypothesis 3: Adolescents' sex does not make significant differences in the structural relationship of research variables.

Table 9 Research variables (boys vs. girls)

Variables	Boys (n = 225)		Girls (n = 221)		*t*	*p*
	M	SD	M	SD		
MIC	79.73	14.59	82.01	13.94	-1.661	.097
Gratitude	77.77	16.60	75.32	17.74	1.490	.137
Moral elevation	63.39	19.72	66.86	17.57	-1.938	.053
Negative affectivity	34.10	21.11	37.85	22.25	-1.804	.072
Detachment	29.39	17.28	28.37	17.05	.620	.536
Antagonism	26.46	16.78	23.41	17.34	1.865	.063
Disinhibition	34.19	19.04	33.59	18.41	.338	.736
Psychoticism	34.55	22.56	30.62	19.24	1.952	.052
Delinquency	17.42	13.91	13.95	11.32	2.842	.005**
Aggression	23.38	18.07	24.18	17.63	-.468	.640

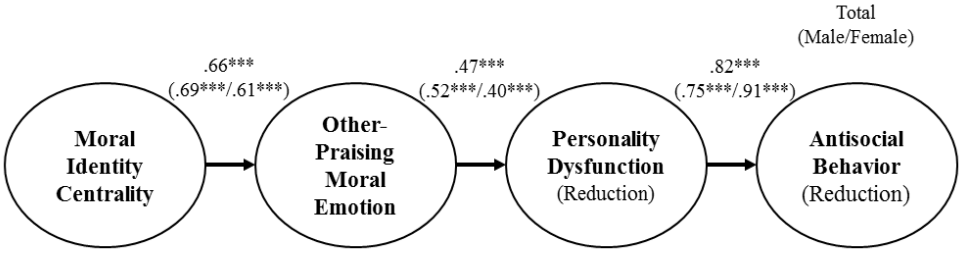
Note. ** $p < .01$, The measured values were transformed into percentage maximum possible (POMP) scores (Cohen, Cohen, Aiken, & West, 1999).

Figure 7 Path diagram of structural model (boys vs. girls)



Note. *** $p < 0.001$, ** p < .01, * p < .05

Figure 8 Modified research model (boys vs. girls)



Note. *** $p < 0.001$

2) Discussion

Korean adolescent participants of the present research did not show any significant sex differences in the measures of respective research variables except delinquency. Boys were more delinquent than girls among Korean adolescent respondents. It is in line with the prior research indicating more antisocial tendencies (externalizing behaviour problems) among boys than girls (Lee et al., 2018; Risser & Eckert, 2016). However, the present study showed that the gap was more outstanding in delinquency than aggression. There were no significant sex differences in aggression. More than a decade ago, Lee, Ha, and Oh (2005) reported that Korean girls were significantly higher than boys in aggression. However, one of the latest

studies reported that boys were higher in physical and verbal aggression than girls; however, there were no significant sex differences in internal aggression (i.e., anger and hostility) (Kim et al., 2020).

There were no significant distinctions between boys and girls in the structural relationship of moral identity centrality, other-praising moral emotions, and maladaptive personality traits. However, applying 90 percent of significance level, girls tend to be higher in moral identity centrality, moral elevation, negative affectivity than boys. However, boys were higher in antagonism and psychoticism than girls. Western studies often report higher moral identity centrality and moral elevation among females than males (Diessner et al., 2013; Kennedy et al., 2017). However, Nunner-Winkler et al. (2007) found a higher moral motivation among boys than girls among German adolescents. Similarly, Ha's (2018) study also reported a higher level of moral identity centrality in boys than girls. To synthesize, it is not clear whether sex makes significant differences in moral identity and emotions across cultures and developmental stages. There is a need for more Korean research about sex differences in moral identity centrality and moral emotions.

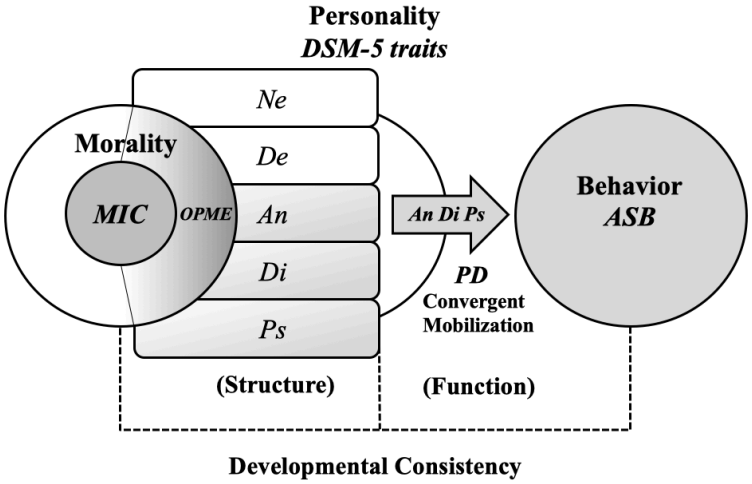
Analyzing sex differences in the structural and modified structural model showed non-significant distinctions with satisfying Hypothesis 3. The result supports that the structural relationships among research variables are likely similar regardless of sex among Korean adolescents. The results align with the previous research that showed solidarity between moral identity and moral emotions irrespective of sex though there might be some gap in the effect size (Diessner et al., 2013; Lefebvre and Krettenauer, 2019). It also coincides with the prior research findings on the solid predictability of moral identity centrality on prosocial or antisocial behaviour regardless of sex (Hardy et al., 2015). Moreover, the present study's findings suggest that sex can be a non-significant determinant even in more comprehensive routes between moral identity centrality and antisocial behaviour via other-praising moral emotions and personality dysfunction. Therefore, results imply that the present study's claim for the developmental consistency might apply to both male and female adolescents.

6. Synthesis

The present study discussed the results by linking to the previous evidence and the theoretical backgrounds. As mentioned in the introduction, the present study's theoretical framework drew on two theorists' ideas. The adoption of Hypothesis 1

supports Allport's (1927, 1931, 1937) theory of personality traits, especially his conception of convergent mobilization. The study demonstrated that the DSM-5 model could embody his seminal concept of traits, as both structure and function, in scientific research. The verification of Hypothesis 2 braces the developmental consistency hypothesis of the study, which was theoretically grounded in Blasi (1980, 1983, 1984, 1988, 1999, 2004a, 2004b) and Allport (1927, 1931,1937). Hypothesis 3 suggests that developmental consistency can exist regardless of sex among Korean adolescents.

Figure 9 Developmental consistency of research variables



Note. MIC (Moral identity centrality), OPME (Other-praising moral emotion), PD (Personality dysfunction), ASB (Antisocial behaviour), Ne (Negative affectivity), De (Detachment), An (Antagonism), Di (Disinhibition), Ps (Psychoticism)

Figure 9 describes a conceptual diagram synthesizing the present study's results. The DSM-5 trait model helped embody Allport's (1937) concept of convergent mobilization into the current study's morality-personality integrative approach to adolescents by linking moral constructs with personality structure and function and providing the dysfunctional degree as the proximate cause of antisocial behaviour. Korean adolescents' antisocial behaviour was strongly predicted by multiple maladaptive personality traits, especially antagonism, disinhibition, and psychoticism. The result supported that a behavioural pattern occurs by the functional influence of the multiple traits related to the behaviour. Also, as the modified research model suggested, moral identity centrality, other-praising moral emotion, and DSM-5 personality dysfunction maintained good cohesion in deriving antisocial behaviour among male and female adolescents. The consistency found among research variables

would guide morality-personality integrative strategies for Korean adolescent development.

IMPLICATIONS AND SUGGESTIONS

1. Implications

Empirical implications

- Adolescent personality dysfunction was a strong predictor of antisocial behaviour. The results imply that Korean adolescents' personality dysfunction is the underlying cause of antisocial behaviour. Around 44.5 percent of Korean adolescents were in moderate and problematic conditions of personality dysfunction. Korean adolescents' antisocial problems need care considering their maladaptive personality traits.
- The study results suggest antagonism, disinhibition, and psychoticism as significant maladaptive traits that predict Korean adolescents' antisocial behaviour. The study found the maladaptive traits also maintained consistent structural links with moral identity centrality and antisocial behaviour.
- Personality dysfunction explained why adolescents with a low moral identity centrality were more likely to be antisocial. Research results provided a possible reason. They had a higher personality dysfunction than adolescents with a high moral identity centrality.
- The mediating effect of other-praising emotion between moral identity centrality and antisocial behaviour hints at how moral identity centrality becomes internalized into personality. The finding implies that other-praising emotions integrate adolescents' moral identity centrality into their personality traits. Other-praising moral emotions can effectively maintain integrity in Korean adolescents' morality and personality.
- The research found a concrete consistency in the structural relationship among moral identity centrality, other-praising moral emotion, personality dysfunction, and antisocial behaviour. Sex differences did not influence the structural relationship. The result encourages adolescent development strategies to consider adolescents' developmental consistency among the research variables.

- The modified research model suggests that moral identity centrality can play an agentic role in positively influencing Korean adolescents' personality and behaviour by facilitating integrity in their intrapersonal functioning.

Theoretical implications

Morality-driven personality-targeted development

Developmental consistency found in the present study challenges efforts towards personality-targeted approaches to adolescent development differently from the conventional personality-based behaviour-targeted approaches. The research findings primarily support the original trait theory of Allport (1927, 1931, 1937). Trait conceptions in modern research empiricism seem pretty distant from his original theories. Allport (1937) defined traits as "dynamic organization" determining people's adaptation to environments (p. 48). Personality traits are not mere structure but also function/process (Allport, 1927, 1931, 1937; Funder, 1991). Modern social science shows limitations of not going beyond personality traits' structural and descriptive aspects. In this respect, Funder's (1997) neo-Allportian claims are highly suggestive for human development. Korean adolescent development should target personality to enhance a virtuous cycle of personality dynamics (i.e., convergent mobilization) through subjective experience.

Morality-driven development

Adolescents' developmental consistency revealed in the modified research model suggests that moral identity centrality can play a pivotal role in morality-driven personality development. The evidence on developmental consistency supports Blasi's agentic (subjective) view of moral identity (1983, 1988, 2004a, 2004b) and integrative morality-personality relation (2004a). In his view, morality cannot stand aloof but exists in reciprocal respect with personality while motivating it through what is central to morality, i.e., moral identity. The current study's findings support the self-consistent bond between moral identity centrality and personality. It is also in line with Krettenauer and Hertz's (2015) assumption that moral identity development would occur when moral identity integrates with every level of personality element. Therefore, one of the essential concerns in adolescent development should be developing adolescents' moral identity centrality (excluding moral hypocrisy) and facilitating the integration into their personality.

Moral emotion development

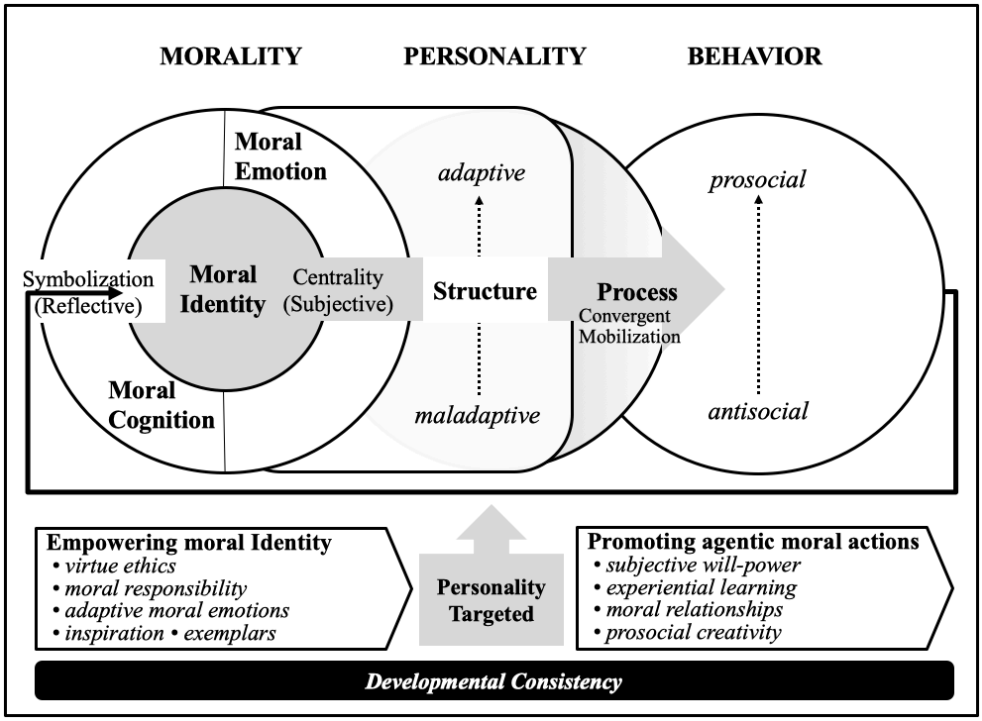
The present study highlighted the importance of other-praising moral emotions as explaining the influence of moral identity centrality on personality

function/dysfunction. The modified research model suggests that a key to integrating moral identity centrality to personality is strengthening 'adaptive' moral emotions such as other-praising emotions. In light of Blasi's (1999) view, the modified research model supports two potential roles of other-praising moral emotions. First, they play as reflectors of moral identity centrality. Second, they serve to integrate moral identity centrality into personality. Other-focused moral emotions are known to be elicited by external stimuli of any particular situation (Haidt, 2003b).

2. Suggestions

1) Morality-personality integrative model

Figure 10 Morality-personality integrative model of adolescent development



The study results highlighted the significance of developmental consistency of morality and personality in adolescent development. Based on the findings and further implications, the present study suggested a conceptual model for researchers and practitioners (i.e., morality-personality integrative model of adolescent development, Figure 10). If developmental consistency maintains to a significant degree, adolescent development will occur when morality, personality, and behaviour have improved in self-consistency. Since personality structure is relatively stable and enduring, adolescents need to recurrently experience adaptive personality processes by upgrading moral identity and moral actions in parallel. The model assumed that the

constant activation of both moral identity and moral action would incur an adaptive cycle of personality function so that they finally settle into dispositional traits.

Therefore, morality-personality integrative development requires conducting two developmental aspects side by side. Firstly, adolescent development should include strategies to empower moral identity. The strategies should build both aspects of moral identity (i.e., centrality and symbolization) by strengthening adolescents' moral virtue systems and eliciting adaptive moral emotions. In that morality structure, strategies for empowering moral identity should consider the following aspects.

- Differently from the cognitive moral development, the model recommends strengthening adolescents' moral virtue systems enough to activate adaptive moral emotions (e.g., Bono et al., 2019; Jolliffe & Farrington, 2006).
- It is also essential to develop and provide adolescents with programs to elicit adaptive moral emotions (e.g., Algoe & Haidt, 2009; Aquino et al., 2011).
- The model recommends the following for the long-term strategic focuses: basic understanding of virtue ethics and moral responsibility, uplifting adaptive moral emotions, moral inspiration, and exposure to moral exemplars.

Secondly, the model encourages adolescents' agentic experience of moral actions. In this model, moral actions play experiential catalysts for adaptive functioning to agentic moral responsibility rather than outcomes of social obligation. The model recommends adolescents' their subjective motivation to be the source of their moral actions. It is to reduce the probability that moral identity may not dissociate with moral actions (cf. Hertz & Krettenauer, 2016). The presents model suggests that agentic moral actions would diminish the symbolization-centrality gap and strengthen moral identity by attenuating moral hypocrisy. The model recommends long-term strategic focuses to promote agentic moral actions: subjective will-power, experiential learning, moral relationship, and prosocial creativity.

Social work policy

- The Korean education needs to intensify strategies to enhance adolescents' moral identities by enhancing virtue ethics (cf. McBeath & Webb, 2002).
- There is a need to develop other-praising emotions for the integrity of Korean adolescent education. Gratitude expressions decrease as Korean adolescents grow older (Leon et al., 2018).
- There is a need for a gradual social movement to change the environments of Korean society as a whole. Cultivating adolescent moral identity would never be successful with fragmented efforts only in education.

- Developing therapeutic and relationship-based moral intervention strategies would reduce adolescent personality pathology. Social work practitioners can readjust the principles of the past moral treatment to modern mental health (e.g., Borthwick et al., 2001)

CONCLUSION

1. Limitations

- The present study narrowly focused on static conditions of morality and personality constructs.
- The research used a brief form of the PID-5 (i.e., PID-5-BF) to assess adolescent personality dysfunction due to the time limit.
- The study collected data by cross-sectional surveys over a limited age group of adolescents.
- There is a limitation in the measures of moral identity centrality. It is unsure whether the moral identity scale is sufficient to accurately assess Blasi's moral identity concept (cf. Aquino & Reed, 2002).

2. Future research

- There should be continuous efforts in research to elaborate adolescent development strategies on how adolescents can develop a virtuous cycle in their morality, personality, and behaviour.
- There should be more efforts to investigate Korean adolescents from a perspective of morality-personality integrative relation.
- Future research needs to enlighten how moral identity interplays with external elicitors of other-praising emotions (gratitude and moral elevation).
- Future studies can examine if Korean adolescents' intrapersonal coherence between moral identity and moral emotions is associated with any cultural personality, e.g., cultural differences in moral foundations (Graham et al., 2011).

3. Conclusion

South Korea is known for its extremely competitive education system, where academic pressure and stress are the major causes of adolescent suicide and

depression (Kwak & Ickovics, 2019). How can we help them adapt to society and enjoy their moral autonomy? Korean society may need a more radical shift towards holistic development. The present study approached Korean adolescents with a morality-personality integrative perspective. It was an effort to dig out the inseparable cohesion in their morality and personality. As the present study showed, adolescence might be the finest hour to experience morality-personality integrative development. South Korea desperately need morality-driven personality-targeted interventions to adolescent development. Moral identity is a central drive to adolescent personality development. Personality is no more value-neutral but value-oriented. Korean adolescents should grow as moral agents capable of being better moral citizens and responsible for their actions.

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Appendices

Appendix A

Publications and Conference Presentations

1. Journal Publications

1) Kim, D. (2019). Determinants associated with drug abuse severity among young drug users in Bengaluru. *GARI International Journal of Multidisciplinary Research, 5(2)*, 7-25. https://multidisciplinaryjournal.globalacademicresearchinstitute.com/main/vol5I2

Author: - Doojong Kim

CHRIST(Deemed to be University), India

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2) Kim, D. (2021). Powerlessness in the moral self: a social cognitive perspective on drug users. *Journal of Social Work Practice in the Addictions*, *21(2)*, 162-178. https://doi.org/10.1080/1533256x.2021.1893967

Journal of Social Work Practice in the Addictions ›

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Research Article

Powerlessness in the moral self: a social cognitive perspective on drug users

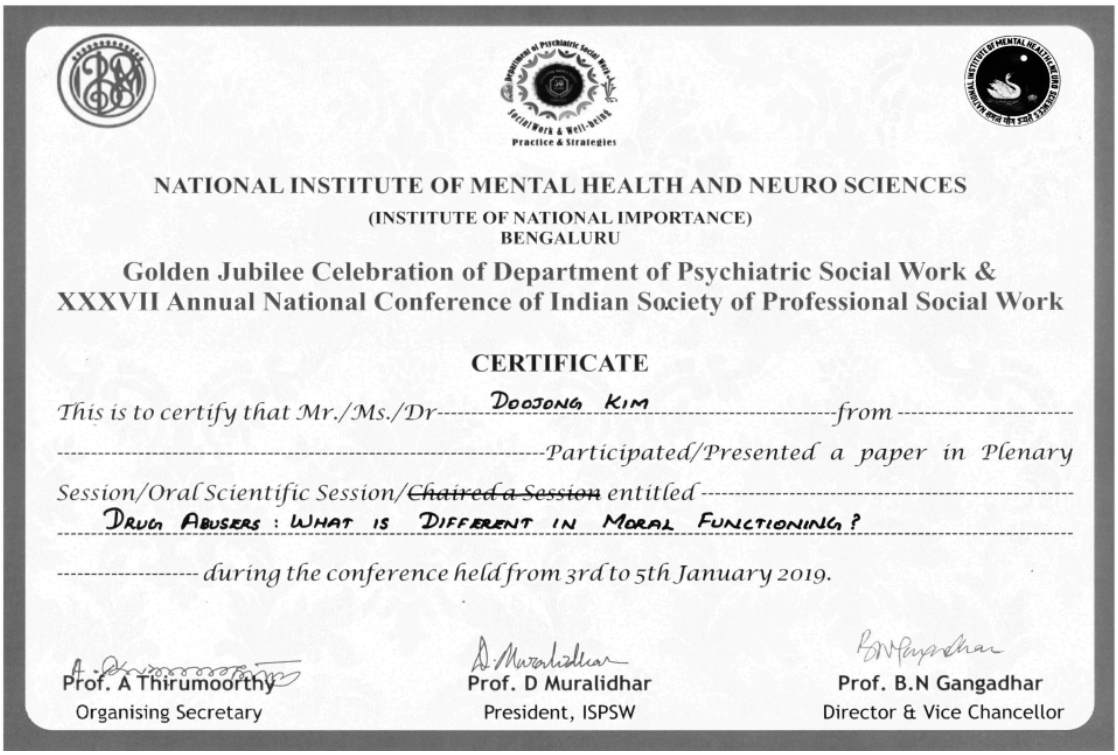
DooJong Kim, MPhil (Social Work), MSW

Pages 162-178 | Received 22 May 2019, Accepted 04 Apr 2020, Published online: 11 Mar 2021

Download citation | https://doi.org/10.1080/1533256X.2021.1893967 | Check for updates

2. Seminar Presentations

1) Kim, D. (2019, January 3-5). Drug abusers: What is different in moral functioning? [Conference session]. Golden Jubilee Celebration of Department of Psychiatric Social Work & 37th Annual National Conference of Indian Society of Professional Social Work, NIMHANS, Bangalore, India.



NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES
(INSTITUTE OF NATIONAL IMPORTANCE)
BENGALURU

Golden Jubilee Celebration of Department of Psychiatric Social Work &
XXXVII Annual National Conference of Indian Society of Professional Social Work

CERTIFICATE

This is to certify that Mr./Ms./Dr DOOJONG KIM from ----------
----------Participated/Presented a paper in Plenary Session/Oral Scientific Session/~~Chaired a Session~~ entitled ----------
DRUG ABUSERS : WHAT IS DIFFERENT IN MORAL FUNCTIONING ?
---------- during the conference held from 3rd to 5th January 2019.

Prof. A Thirumoorthy, Organising Secretary
Prof. D Muralidhar, President, ISPSW
Prof. B.N Gangadhar, Director & Vice Chancellor

2) Kim, D. (2019, September 27). Determinants associated with drug abuse severity among young drug users in Bengaluru [Conference session]. International Conference on Drug Abuse Prevention and Illegal Drugs, Galle Face Hotel, Colombo, Sri Lanka.

CERTIFICATE OF PRESENTATION

Awarded to

Doojong Kim

For Presenting the Paper

"DETERMINANTS ASSOCIATED WITH DRUG ABUSE SEVERITY AMONG YOUNG DRUG USERS IN BENGALURU"

At International Conference on Drug Abuse Prevention and Illegal Drugs

27th September 2019 @ Galle Face Hotel, Colombo, Sri Lanka.

Dr. S. D. Edirisinghe
Co - Chair

Sampath Abeywickrama
Organizing Chair

CERTIFICATE OF BEST PAPER AWARD

Doojong Kim

for

"DETERMINANTS ASSOCIATED WITH DRUG ABUSE SEVERITY AMONG YOUNG DRUG USERS IN BENGALURU"

At International Conference on Drug Abuse Prevention and Illegal Drugs

27th September 2019 @ Galle Face Hotel, Colombo, Sri Lanka.

Dr. Herath Gamage
Head - Scientific Review

Sampath Abeywickrama
Organizing Chair

Appendix B

Research Conduct and Ethics (RCEC) Approval

CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE - INDIA

CENTRE FOR RESEARCH

CU:RCEC/00015/8/18 25 AUGUST 2018

Mr. KIM DOO JONG
Reg No. :1640070,
Department of SOCIAL WORK
CHRIST (Deemed to be University), Bengaluru

Sub: Ethical Approval of the Study Titled "Moral Emotions,Moral Identity and Maladaptive Personality Traits among Adolescents in India and South Korea".

The Institutional Ethics committee has reviewed your application for ethical clearance for the Study titled "Moral Emotions,Moral Identity and Maladaptive Personality Traits among Adolescents in India and South Korea".

The committee has cleared your proposal for data collection after assessing the ethical aspects.

Sincerely,

T.S.Sam

Dr Tony Sam George
(Member Secretary to Ethics Committee)
Additional Director
Center for Research
CHRIST (Deemed to be University), Bengaluru

Appendix C

Informed Consent Forms

1. Pilot Study

설문지

안녕하세요?

이 조사는 본인의 박사과정 논문을 위한 예비 연구로, 한국 청소년들의 도덕 정체성, 도덕 정서, 부적응 성격 특성의 관계를 조사하여 이에 따른 연구 모델의 수립이 적절한 지를 알아보고자 함입니다.

설문은 무기명으로 하며 기밀입니다. 설문지를 통해 얻은 정보는 오직 학술적인 목적으로만 사용될 것을 알려드립니다.

응답 중에 불쾌하거나 불편하게 느낀다면 그만두어도 됩니다.

모든 응답은 최근 자신의 일 년 정도 이내의 평상시 모습을 생각하며 해주십시오.

감사합니다.

CHRIST 대학교 대학원
사회복지학 전공 김두종 드림

응답자는 미성년자이므로 아래에 부모님 중 한 분과 학생의 동의에 표시하여 주시고 설문지에 답해주시기를 부탁드립니다.

년 월 일

응답자 확인 (동의함 / 동의 안함)

부모님 확인 (동의함 / 동의 안함)

2. Primary Study

설문지

안녕하세요?

이 조사는 본인의 박사과정 논문을 위한 것입니다. 이 설문지는 한국청소년의 도덕성, 성격특성 및 반사회적 행동을 조사하여 청소년 개발을 위한 도덕성-성격 통합 접근을 제안하기 위한 목적으로 작성되었습니다.

설문은 무기명으로 하며 기밀입니다. 설문지를 통해 얻은 정보는 오직 학술적인 목적으로만 사용될 것을 알려드립니다.

이 설문지는 일곱 부분으로 구성되어 있습니다.
응답 중에 불쾌하거나 불편하게 느낀다면 그만두어도 됩니다.

모든 응답은 최근 자신의 일 년 정도 이내의 평상시 모습을 생각하며 해주십시오.

감사합니다.

인도 CHRIST 대학교 대학원

응답자는 미성년자이므로 아래에 부모님 중 한 분과 학생의 서명으로 동의하여 주시고 설문지에 답해주시기를 부탁드립니다.

년 월 일

응답자 서명_____

부모님 서명_____

Appendix D

Thesis Title Modification Approval

12-02-2019

To
Additional Director
Centre for Research,
CHRIST Deemed to be University

Dear Sir,

Subject: Request for modification of PhD thesis Title

I request your consent for the modification of my PhD thesis title. Research Advisory Committee (RAC) meeting held on 6th February 2019 advised me to modify the title of my PhD thesis. This is because members of the committee were concerned about the logical vulnerabilities caused by a comparative approach of the study in terms of moral relativism.

Original Title: "Moral Emotions, Moral Identity and Maladaptive Personality Traits among Adolescents in India and South Korea"

New Title: "Moral Identity, Moral Emotions and Maladaptive Personality Traits among Adolescents in South Korea"

Hence I request your permission to change my PhD thesis title.

Best regards

Kim Doo Jong

Kim Doo Jong
PhD scholar (1640070)
Dept. of Social Work

12/02/19

Dr. Mathew P M
Research Supervisor
Dept. of Social Work

Hemalatha
RAC member

Rajesh C
RAC member

Ameesha C
RAC member

Approved
Tony Sam George, HoD
Additional Director

Appendix E

Tentative Structure of Dissertation

Chapter 1 Introduction

1.1 Background of the Study
1.2 Research Perspectives
1.3 Key Concepts
1.4 Aim of the Study
1.5 Rational for the Study

Chapter 2 Review of Literature

2.1 Social work and Morality
2.2 Morality and Personality Pathology
2.3 Antisocial Behaviour among Korean Adolescents
2.4 Existing Personality Models
2.5 DSM-5 Maladaptive Personality Traits
2.6 Moral Identity, Personality Pathology and Antisocial Behaviour
2.7 Other-Praising Moral Emotion
2.8 Sex Differences
2.9 Research Gaps

Chapter 3 Theoretical Background

3.1 Adolescent Antisocial Problems
3.2 Personality Traits in Development
3.3 Developmental Consistency Hypothesis
3.4 Personality-Targeted Development and Challenges
3.5 DSM-5 Traits: Personality Structure and Function
3.6 Moral Identity: Agentic Developmental Drive
3.7 Moral Emotions: Integrative Role
3.8 Theoretical Framework
3.9 Sex Differences

Chapter 4 Research Method

3.1 Research Design and Flow
3.2 Conceptual and Operational Definitions
3.3 Research Model and Hypotheses
3.4 Data Collection
3.5 Data Analysis
3.6 Ethical Considerations

Chapter 5 Pilot Study
5.1 Aim and Objectives
5.2 Participants and Procedure
5.3 Measures
5.4 Data Analysis
5.5 Discussion: Applying to the Primary Research

Chapter 6 Results and Discussion
4.1 Descriptive Statistics
4.3 Construct Validity
4.4 Hypothesis 1
4.5 Hypothesis 2
4.6 Hypothesis 3
4.7 Summary and Synthesis

Chapter 7 Conclusion
5.1 Summary
5.2 Implications
5.3 Suggestions
5.4 Limitations
5.5 Future Research
5.6 Conclusion